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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,829	01/19/2001	Morris D. Ho	WEB1P003	9919
22434	7590 05/23/2003			
BEYER WEAVER & THOMAS LLP			EXAMINER	
P.O. BOX 77 BERKELEY,	8 , CA 94704-0778		STOCK JR, GORDON J	
			ART UNIT	PAPER NUMBER
			2877	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	10.
		09/765,829	HO ET AL.	14/
	Office Action Summary	Examin r	Art Unit	
		Gordon J Stock	2877	
Period fo	The MAILING DATE of this commun or Reply	ication appears on the cover sheet	with the correspondence add	dress
THE I - Externance - afternown - If thence - If NO - Failu - Any r	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUNI mains of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comm period for reply specified above is less than thirty (3) period for reply is specified above, the maximum sta re to reply within the set or extended period for reply eply received by the Office later than three months a d patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no event, however, may nunication. 0) days, a reply within the statutory minimum of that atutory period will apply and will expire SIX (6) Mowill, by statute, cause the application to become	a reply be timely filed hirty (30) days will be considered timely DNTHS from the mailing date of this co ABANDONED (35 U.S.C. & 133).	: mmunication.
1)[Responsive to communication(s) fil	ed on		
2a) <u></u> □	This action is FINAL.	2b)⊠ This action is non-final.		
3)□ Dispositi	Since this application is in condition closed in accordance with the pract on of Claims	i for allowance except for formal mice under <i>Ex parte Quayle</i> , 1935 C	eatters, prosecution as to the C.D. 11, 453 O.G. 213.	e merits is
4)🖂	Claim(s) 1-48 is/are pending in the a	application.		
	4a) Of the above claim(s) is/aı	re withdrawn from consideration.		
5)□	Claim(s) is/are allowed.			
6)🛛	Claim(s) 1-3,7-12,14-16,18-25,32,34	1-37 and 42-47 is/are rejected.		
7)🖂	Claim(s) 4-6,13,17,26-31,33,38-41, a	and 48 is/are objected to.		
8)□	Claim(s) are subject to restric	tion and/or election requirement.		
Application	on Papers			
9) 🔲 7	The specification is objected to by the	Examiner.		
10)⊠ ٦	The drawing(s) filed on <u>19 January 20</u>	<u>001</u> is/are: a) <u>□</u> accepted or b) <mark>⊠</mark> obj	jected to by the Examiner.	
	Applicant may not request that any obje	ection to the drawing(s) be held in abe	yance. See 37 CFR 1.85(a).	
11)□ T	The proposed drawing correction filed	l on is: a)□ approved b)□	disapproved by the Examine	r.
	If approved, corrected drawings are req	uired in reply to this Office action.		
12) 🔲 T	The oath or declaration is objected to	by the Examiner.		
Priority u	nder 35 U.S.C. §§ 119 and 120			
13) 🗌	Acknowledgment is made of a claim	for foreign priority under 35 U.S.C.	. § 119(a)-(d) or (f).	
a)[☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority of	documents have been received.		
:	2. Certified copies of the priority of	documents have been received in a	Application No	
		of the priority documents have been ational Bureau (PCT Rule 17.2(a)). In for a list of the certified copies no		stage
14)⊠ A	cknowledgment is made of a claim fo	r domestic priority under 35 U.S.C	. § 119(e) (to a provisional a	application).
	☐ The translation of the foreign lang			
Attachment((s)			
2) Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PT ation Disclosure Statement(s) (PTO-1449) Pa	O-948) 5) Notice of	Summary (PTO-413) Paper No(s Informal Patent Application (PTO	
S. Patent and Tra TO-326 (Rev		Office Action Summary	Part of I	Paper No. 6

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 20, 21, and 28 of Fig. 1; 20 and 21 of Fig. 2; 20 of Fig. 3; 38 of Fig. 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1, 5, 6, 10, 15, 16, 17, 19, 21, 23, 24, 27, 34, 36, 37, 38, 41, 42, and 44 are objected to for the following: for claim 1, the phrase, "the roll map," lacks antecedent basis; for claim 5, the phrase, "the application of product set-up parameters," lacks antecedent basis; for claim 6, the phrase, "the product set-up parameters," lacks antecedent basis; for claim 10, the phrase, "the actual certification data," lacks antecedent basis; for claim 15, the phrase, "the vision hardware," lacks antecedent basis; for claim 16, the phrase, "the cameras, lenses, and light sources," lacks antecedent basis; for claim 17, the phrase, "the camera alignment, the lens focus, and the light source alignment," lacks antecedent basis; for claim 19, the phrase, "the desired level of flaw detection," lacks antecedent basis; for claim 21, the phrase, "the current," lacks antecedent basis; for claim 23, the phrase, "the certification report," lacks antecedent basis; for claim 24, the phrase, "the cause," lacks antecedent basis; for claim 27, the phrase, "the actual certification data," lacks antecedent basis; for claim 34, the phrase, "the actual certification data," lacks antecedent basis; for claim 36, the phrase, "the vision hardware," lacks antecedent basis; for claim 37, the phrase, "the cameras, the lenses, and the light source," lacks antecedent

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basis; for claim 38, the phrase, "the camera alignment, the lens focus, and the light source alignment," lacks antecedent basis; for claim 41, the phrase, "the desired level of flaw detection," lacks antecedent basis; for claim 42, the phrase, "the predetermined certification data," lacks antecedent basis; for claim 44, the phrase, "the cause of a detected defect," lacks antecedent basis. Corrections are required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors. Corrections are required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-2, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Tyne et al. (4,170,419).

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As for claim 1, Van Tyne in an optical web inspection system discloses inspecting a roll of web material to determine the number, type, and location of one or more detectable defects along the web material; outputting a data representation of a roll map; certifying the accuracy of the roll map object representation of the inspected web material to be within a predetermined range of tolerances (col. 6, lines 50-67; col. 7, lines 1-50).

As for claim 2, Van Tyne discloses performing a self-diagnostic test on said inspection system to determine the performance of the web inspection by the inspection system (col. 13, lines 14-27).

As for claims 8 and 9, Van Tyne discloses generating a digital Product Inspection

Certificate containing and certifying the object map and generating a digital signature, batch information concerning the web material, with the Product Inspection Certificate (col. 7, lines 1-50; Table I).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 3, 7, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tyne et al. (4,170,419).

As to claims 3 and 7, Van Tyne discloses everything as above (see claim 2). In addition, Van Tyne discloses diagnostics applied whereas velocity error messages and ready or fault messages may occur. The velocity data relates to the conveyance of the web as well as the

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microprocessor of the inspection system (col. 13, lines 10-25; col. 15, lines 55-67; col. 16, lines 1-50). Therefore, it would be obvious to one skilled in the art that the diagnostic testing comprised retrieving certification data and comparing the data to standardized data, for the system retrieves standardized data of appropriate velocity settings and compares it to the actual velocity settings to ensure that the actual velocity is within tolerance ranges so web inspection may be performed and the microprocessor timing circuitry may be adequately programmed to compensate for the actual velocity maintained.

As for claim 34, Van Tyne discloses a web inspection system adapted to inspect the roll of web material applying certification data relating to web inspection system and the particular web material to detect at least one or more defects (cols. 6-10); a diagnostic device (col. 13, lines 10-25); a certifying device to certify accuracy of the data map (col. 7, lines 20-31; col. 25, lines 20-67; col. 26, lines 1-35; col. 42). Van Tyne discloses diagnostics applied whereas velocity error messages and ready or fault messages may occur. The velocity data relates to the conveyance of the web as well as the microprocessor of the inspection system (col. 13, lines 10-25; col. 15, lines 55-67; col. 16, lines 1-50). Therefore, it would be obvious to one skilled in the art that the diagnostic device retrieves certification data, for the system retrieves standardized data of appropriate velocity settings and compares it to the actual velocity settings to ensure that the actual velocity is within tolerance ranges so web inspection may be performed and the microprocessor timing circuitry may be adequately programmed to compensate for the actual velocity maintained.

As for claim 35, Van Tyne discloses everything as above (see claim 34). In addition, Van Tyne discloses system integrity test data, velocity data, of predetermined components, the

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microprocessor and conveyor system, of the web inspection system (col. 13, lines 10-25; col. 15, lines 55-67; col. 16, lines 1-50).

As for claim 36, Van Tyne discloses everything as above (see claim 35). In addition, Van Tyne discloses the predetermined components such as the microprocessor and timing circuitry comprise the vision hardware (col. 9, lines 30-67; col. 10; col. 16).

As for claim 37, Van Tyne discloses everything as above (see claim 36). In addition, the vision hardware includes cameras, lenses, and light sources (col. 9, lines 30-67; col. 10; col. 16, lines 30-52).

9. Claims 10-12, 14-16, 18-21, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tyne et al. (4,170,419) in view of Adelson (5,006,722) and further in view of Dante et al. (5,365,596).

As for claim 10, Van Tyne discloses a preprocessor differentiates a detected defect from the actual surface being inspected (col. 7, lines 10-15); inspecting the roll of web material for one or more defects, detecting at least one of the one or more defects, determining the location of the at least one detected defect, recording the detection of the defect; measuring the actual certification data; comparing the actual certification data to predetermined data, grading tolerances; and printing out a defect map certifying the data is within grading tolerances (col. 7, lines 20-35; col. 42). Van Tyne is silent concerning calibration; however, Adelson in a flaw annunciator teaches calibrating the system in relation to known flaws to define the flaws the system may detect (col. 3, lines 1-20). Therefore, it would be obvious to one skilled in the art at the time to have the system calibrated to conform to known flaw data in order for the system to detect specific types of flaws. In addition, it would be obvious to one skilled in the art that the

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system is calibrated, for the preprocessor can differentiate defects from the normal surface being inspected. As for fiducial marks, Van Tyne is silent. Dante in an apparatus for image inspection teaches using fiducial marks to synchronize the scanning with the web motion. Therefore, it would be obvious to one skilled in the art at the time the invention was made to have the location of the defects determined through fiducial marks, for fiducial marks are used in synchronizing the scanning in relation to the web motion.

As for claim 11, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 10). In addition, Van Tyne discloses system integrity test data, velocity data, of predetermined components, the microprocessor and conveyor system, of the web inspection system; measuring includes performing a diagnostic of the velocity to correct the timing circuitry depending on velocity found in order to inspect the web correctly (col. 7, lines 5-30; col. 13, lines 10-25; col. 15, lines 55-67; col. 16, lines 1-50).

As for claims 12 and 14, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 11). In addition, the diagnostic test is performed before every run and periodically within a predetermined time interval such as the time interval that it takes for the web to achieve adequate velocity or the time for the operator to enter data and the READY signal to appear (col. 13, lines 1-60).

As for claim 15, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 11). In addition, Van Tyne discloses the predetermined components such as the microprocessor and timing circuitry comprise the vision hardware (col. 9, lines 30-67; col. 10; col. 16).

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As for claim 16, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 11). In addition, Van Tyne discloses the vision hardware includes cameras, lenses, and light sources (col. 9, lines 30-67; col. 10; col. 16, lines 30-52).

As for claim 18, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 11). In addition, Van Tyne discloses differentiating detected defects from background variations of fabric surfaces inspected and that there is a yardage counter and velocity correction circuitry (col. 7, lines 5-30).

As for claim 19, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 18). In addition, Van Tyne mentions a preprocessor differentiating detected defect from background variations found in the fabric inspected (col. 7, line 5-10). Therefore, it would be obvious to one skilled in the art that a inspection parameter include a desired level of flaw detection in order to differentiate a defect from the fabric's surface being inspected.

As for claim 20, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 18). In addition, Van Tyne discloses inspection parameters provided by an operator (col. 7, lines 20-60).

As for claim 21, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 10). In addition, Van Tyne discloses time stamping the current measuring the data (cols. 14-16).

As for claim 23, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 10). In addition, Van Tyne discloses a digital signature is generated that identifies loom, bale, and style of web inspected (Table I).

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As for claim 24, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 10). In addition, Van Tyne discloses determining the cause of the at least one detected defect (col. 42, lines 1-40).

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tyne et al. (4,170,419) in view of Adelson (5,006,722) and further in view of Dante et al. (5,365,596) and further in view of Smith, Jr. (4,166,541).

As for claim 22, Van Tyne in view of Adelson and Dante disclose everything as above (see claim 10). In addition, Van Tyne discloses a product report comprising actual certification data and the defect map (Table I). Van Tyne's output report does disclose initial parameters of the web such as width, style, loom, bale, but Van Tyne is silent concerning predetermined data. Smith in a web inspection device teaches an output report that comprises reference data (bottom of cols. 13-14; col. 15, lines 1-50). Therefore, it would be obvious to one skilled in the art at the time the invention was made to have the output report comprise predetermined reference data in order to compare the actual data to a reference (tolerance) data in order to classify the data as errors or not.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tyne et al. (4,170,419) in view of Adelson (5,006,722) and further in view of Dante et al. (5,365,596) in evidence of Bett et al. (6,266,436).

As for claim 25, Van Tyne in view of Adelson and Dante discloses everything as above (see claim 24). In addition, the defect analysis is configured to classify the defect (col. 42, lines 1-20). Therefore, it would be obvious to one skilled in the art at the time the invention was made that the system does determine the cause of a detected defect by comparing the data with existing

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defect data, for the computer system classifies the defect type. Also Bett in process control using multiple detections teaches processing signals through comparison to database signal combinations to develop a conclusion as to the probable cause of any anomaly (col. 6, lines 1-15).

12. Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tyne et al. (4,170,419) in view of Smith, Jr. (4,166,541).

As for claim 42, Van Tyne discloses everything as above (see claim 34). In addition, Van Tyne discloses a product report comprising actual certification data and the defect map (Table I). Van Tyne's output report does disclose initial parameters of the web such as width, style, loom, bale, but Van Tyne is silent concerning predetermined data. Smith in a web inspection device teaches an output report that comprises reference data (bottom of cols. 13-14; col. 15, lines 1-50). Therefore, it would be obvious to one skilled in the art at the time the invention was made to have the output report comprise predetermined reference data in order to compare the actual data to a reference (tolerance) data in order to classify the data as errors or not.

As for claim 43, Van Tyne in view of Smith discloses everything as above (see claim 42). In addition, Van Tyne discloses a digital signature is generated that identifies loom, bale, and style of web inspected (Table I).

13. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tyne et al. (4,170,419) in evidence of Bett et al. (6,266,436).

As for claim 44, Van Tyne discloses everything as above (see claim 34). In addition, the defect analysis is configured to classify the defect (col. 42, lines 1-20). Therefore, it would be

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obvious to one skilled in the art at the time the invention was made that the system does determine the cause of a detected defect by comparing the data with existing defect data, for the computer system classifies the defect type. Also Bett in process control using multiple detections teaches processing signals through comparison to database signal combinations to develop a conclusion as to the probable cause of any anomaly (col. 6, lines 1-15).

14. Claims 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Tyne et al. (4,170,419) in view of Dante et al. (5,365,596).

As for claims 45-47, Van Tyne discloses everything as above (see claim 34). In addition, Van Tyne discloses a location analysis device to determine the location of the at least one detected defect relative the roll of web material and a recording device to record the detection of the at least one detected defect (col. 42, lines 1-40). Van Tyne is silent concerning the use of fiduciary indicators. Dante in a method and apparatus for inspection of continuously moving objects teaches using fiducial marks to synchronize line scanning with web motion (col. 5, lines 55-67). Therefore, it would be obvious to one skilled in the art at the time the invention was made to have the system comprise fiducial marks on the web in order to synchronize the line scanning of the web with the web motion. As for the location of the fiducial marks on the web, this an arrangement of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fiducial marks placed along said roll or along an edge of the web material since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70

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Allowable Subject Matter

Claims 4-6, 13, 17, 26-33, 38-41, and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and rewritten to overcome any objections or 112 second paragraph rejections as stated above.

As to claim 4, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a method for inspection of a roll of web material through a web inspection system "said performing a self-diagnostic test includes performing a System Integrity Test measuring performance and calibration of predetermined components of the web inspection system," in combination with the rest of the limitations of claims 4-5.

As to claim 6, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a method for inspection of a roll of web material through a web inspection system "said certification data includes System Integrity Test Data relating to the calibration and operation of predetermined components of the web inspection system, and Product Calibration Test Data reviewing the product set-up parameters applied for the particular web material inspected" in combination with the rest of the limitations of claim 6.

As to claim 13, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a method for certifying an inspection of a roll of web material through a web inspection system time stamping the performance of the Self-Diagnostic Test in combination with the rest of the limitations of claim 13.

As to claim 17, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a method for certifying an inspection of a roll of web material through a

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web inspection system said System Integrity Test Data includes at least one of a camera alignment, a lens focus, and a light source alignment in combination with the rest of the limitations of claim 17.

As to claim 26, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a method for certifying an inspection of a roll of web material through a web inspection system re-inspecting the roll of web material through the same web inspection system or an independent second web inspection system to verify the certification by detecting the at least one of the one or more defects through the web inspection system in combination with the rest of the limitations of claims 26-33.

As to claim 38, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a web inspection certificate system to certify an inspection a roll of web material through a web inspection system said System Integrity Data include at least one of a camera alignment, a lens focus, and a light source alignment in combination with the rest of the limitations of claim 38.

As to claim 39, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a web inspection certificate system to certify an inspection a roll of web material through a web inspection system a time stamp device to time stamp the occurrence of a Self-Diagnostic Test performed by the diagnostic device in combination with the rest of the limitations of claim 39.

As to claim 40, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a web inspection certificate system to certify an inspection a roll of web material through a web inspection system said actual certification data further includes Product

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Calibration Data corresponding to the particular web material being inspected to certify which product set-up parameters were employed during the web inspection, and that they have not been altered in combination with the rest of the limitations of claims 40-41.

As to claim 48, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a web inspection certificate system to certify an inspection a roll of web material through a web inspection system said fiduciary indicators include the detected one or more defects relative to their placement along said roll of web material in combination with the rest of the limitations of claim 48.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent 4,670,659 to Loose

U.S. Patent 5,068,799 to Jarrett, Jr.

U.S. Patent 5,440,648 to Roberts et al.

U.S. Patent 5,715,181 to Horst

U.S. Patent 5,774,177 to Lane

U.S. Patent 5,960,374 to Lausier

U.S. Patent 6,084,681 to Keane

U.S. Patent 6,236,429 to Ho

Fax/Telephone Numbers

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

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1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (703) 308-7722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (703) 305-4787. The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the receptionist whose telephone number is (703) 308-0956.

₽A gs

May 15, 2003

andra V. Smith

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